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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,929	11/06/2001	Reidar Schumann-Olsen	P13047	9962
27045	7590	05/16/2005	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024			KHUONG, LEE T	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,929

Applicant(s)

SCHUMANN-OLSEN ET AL.

Examiner

Lee Khuong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/06/2001.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bargeton et al. (US 4,402,075) hereafter is referred as Bargeton in view of Milliron et al. (US 6,208,670) hereafter is referred as Milliron.

Regarding claim 1, Bargeton teaches A Step-By-Step Remote Locating System For Repeaters In A PCM Link. Bargeton' communication system comprising:

a line terminal (1, Fig. 1, *a monitoring end equipment*);

a network terminal (2, Fig. 1, *a remote end equipment*); and

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a repeater means (5p and 6p, Fig. 1, *a pair of repeaters*), said line terminal connected to said repeater means by a first transmission line (3p, Fig. 1, *a first transmission line*), said repeater means further connected to said network terminal by a second transmission line (4p, Fig. 1, *a second transmission line*), and transmission between said line terminal and said network terminal is activated (*state "0"*) and deactivated (*"state "1"*) with a certain activation/deactivation process (Fig. 3, see col. 11, lines 10-42, *repeaters with flip-flop for loop-back testing with state "0" and "1"*), and wherein said repeater means is adapted to detect said activation/deactivation process and to alternate a flip-flop included in said repeater means between a first state and a second state on response to a detected activation/deactivation process (see col. 9, lines 39-55, *the repeaters detect activation and deactivation in downstream and upstream*), said transmission is passed through said repeater means when said flip-flop is in said first state, and is looped back in said repeater means when said flip-flop is in said second state (see col. 9, line 39 – col. 11, line 42).

Bargeton does not expressly teach the pair of repeaters (*5p and 6p*) can be implemented as a single bidirectional repeater.

Milliron teaches a single bidirection repeater (37, Fig. 5, *a bidirectional repeater*, see col. 10, lines 58-60).

It would have been obvious to one of ordinary skill in the art, at the time invention was made, to employ the bidirection repeater taught by Milliron with the Loop-back testing of Bargeton to arrive the claimed invention as specified in claim 1.

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The suggestion/motivation for doing so would have been to maximize use of space on a system board for the purpose of minimizing and efficient space used by the bidirectional repeater.

Regarding claim 2, Bargeton and Milliron teach all limitations set forth in the rejection of claim 1. Milliron further teaches wherein a free bit (*a **START signal***) in an overhead channel (*EOC*) of the transmission is set to a first level when transmitting in the line terminal-network terminal direction, and a second level when transmitting in the network terminal-line terminal direction (see col. 18, line 40 – col. 20, line 11).

Regarding claim 3, Bargeton and Milliron teach all limitations set forth in the rejection of claim 1. Bargeton further teaches wherein said repeater means is a signal repeater (see col. 6, lines 40-52).

Regarding claim 4, Bargeton and Milliron teach all limitations set forth in the rejection of claim 1. Milliron further teaches wherein said communication system is an HDSL (High speed Digital Subscriber Line) communication system and said activation/deactivation process is an activation/deactivation process used in said HDSL communication system (see col. 17, line 40 – col. 18, line 64).

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Regarding claim 5, Bargeton and Milliron teach all limitations set forth in the rejection of claim 2. Bargeton further teaches wherein said first level is "1", and said second level is "0" (see col. 9, line 60 – col. 10, line 16 and col. 11, lines 10-42).

Regarding claim 6, Bargeton and Milliron teach all limitations set forth in the rejection of claim 2. Milliron further teaches wherein the arrangement is used in standardized HDSL error monitoring at the line terminal when said transmission is looped back in said repeating means, indicated by said free bit being set to said first level (see col. 17, line 40 – col. 19, line 30).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

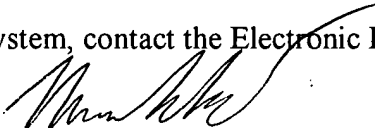
Casper et al. (US 4,451,916); Gewin et al. (US 5,060,226); Turudic (US 5,422,876); Murphy (US 5,892,756) are cited to show a System of Managed HDSL Repeater.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Khuong whose telephone number is 571-272-3157. The examiner can normally be reached on 9AM - 5PM.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lee T. Khuong
Examiner
Art Unit 2665



ALPUS H. HSU
PRIMARY EXAMINER